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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,456	03/26/2004	Takashi Koga	2004_0493A	7657

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EXAMINER	
BOYKIN, TERRESSA M	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/809,456	KOGA ET AL.
	Examiner	Art Unit
	Terressa M. Boykin	1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3-26-04* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over ***USPub 20010034419*** (abstract, cols. 1-8, see claims 22-28) in view of ***JP-A 59-12952.***

Applicants' claims are directed to a polycarbonate resin composition comprising: (1) 100 parts by weight of a polycarbonate resin (compound A); (2) 0.01 to 10 parts by weight of at least one ultraviolet light absorber (compound B) selected from the group of a cyclic imino ester represented by the following general formula (I); and (3) 0.01 to 1 part by weight of a fatty acid ester compound (component C) which is an ester of a polyhydric alcohol and 500 to 2, 000 g/mol:

USPub 20010034419 discloses a thermoplastic resin composition comprising: a transparent aromatic thermoplastic resin (a) and a copolyester resin (b) comprising at least two kinds of dicarboxylic acid moieties and one kind of diol moiety, 1 to 50 mol % of the dicarboxylic acid moieties being a naphthalene dicarboxylic acid moiety, the ratio of (a) to the combined amount of (a) and (b) being 55 to 99.99% by weight, and the ratio of (b) being 0.01 to 45%

by weight.

(c) an antioxidant in an amount of 0.001 to 1 part by weight

(d) a release agent in an amount of 0.001 to 1 part by weight,

(e) a weathering resistance improver in an amount of 0.001 to 10 part by weight and

(f) an ionizing radiation stabilizer in an amount of 0.001 to 20 part by weight, based on the combined amount (100 parts by weight) of the components (a) and (b).

The polycarbonate resins usable as (a) include polymers or copolymers of the thermoplastic aromatic polycarbonates obtained by reacting aromatic dihydroxyl compounds or these compounds plus a small quantity of polyhydroxyl compounds with phosgene or a carbonic acid diester. Such polycarbonates may be branched.

The copolyester resins usable as component (b) in the reference comprises at least two kinds of dicarboxylic acid moieties and one kind of diol moiety, in which 1 to 50 mol % of the whole dicarboxylic acid moiety is a naphthalene dicarboxylic acid. A method for obtaining such a copolyester resin comprises copolymerizing naphthalene dicarboxylic acid and a dicarboxylic acid other than naphthalenedicarboxylic acid with a diol. In place of the naphthalenedicarboxylic acid and/or said other dicarboxylic acid, ester-forming derivatives of thereof may be used.

The reference discloses examples of antioxidants (c) which include triphenyl phosphite, tris(nonylphenyl) phosphite, dilaurylhydrogen phosphite, triethyl

phosphite, tridecyl phosphite, tris(2-ethylhexyl) phosphite, tris(tridecyl) phosphite, tristearyl phosphite, diphenyl monodecyl phosphite, monophenyl didecyl phosphite, diphenyl mono(tridecyl) phosphite, tetraphenyl dipropyleneglycol diphosphite, tetraphenyl tetra(tridecyl) pentaerythritol tetraphosphite, hydrogenated bisphenol A phenol phosphite polymer, diphenyl hydrogen phosphite, 4,4'-butylidene-bis(3-methyl-6-t-butylphenyldi(tridecyl) phosphite), tetra(tridecyl) 4,4'-isopropylidenediphenyl diphosphite, bis(tridecyl) pentaerythritol diphosphite, bis(nonylphenyl) pentaerythritol diphosphite, dilauryl pentaerythritol diphosphite, distearyl pentaerythritol diphosphite, tris(4-t-butylphenyl) phosphite, tris(2,4-di-t-butylphenyl) phosphite, hydrogenated bisphenol A-pentaerythritol phosphite polymer, tetrakis(2,4-di-t-butylphenyl) 4,4'-biphenylene phosphonite, bis(2,4-di-t-butylphenyl) pentaerythritol diphosphite, bis(2,6-di-t-butyl-4-methylphenyl) pentaerythritol diphosphite,

As release agent (d) used in the reference, note that higher fatty acids and their esters, especially higher alcohol esters of higher fatty acids are preferred. Polyhydric alcohol esters of higher fatty acids are also preferable.

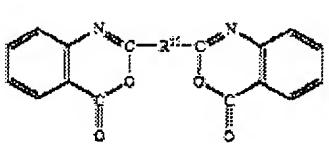
With regard to the weathering resistance improvers (e), note that the reference states in the present invention may be a compound which is generally known as an ultraviolet absorber or light stabilizer. This agent is expected to function to make harmless visible light rays or ultraviolet rays by absorbing their light energy and converting it into heat energy, or to function to render harmless the precursor generated by the photochemical actions. Examples of the

hindered amine-based compounds include bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate, bis(1,2,2,6,6-pentamethyl-- 4-piperidyl) sebacate, bis(1-octyloxy-2,2,6,6-tetramethyl-4-piperidyl) sebacate, bis(1,2,2,6,6-pentamethyl-4-piperidyl)-2-(3,5-di-t-butyl-4-hydr- oxybenzyl)-2-n-butylmalonate, dimethyl succinate/1-(2-hydroxyethyl)-4-hydr- oxy-2,2,6,6-tetramethylpiperidine polycondensate, poly((6-(1,1,3,3-tetrame- thylbutyl)amino-1,3,5-triazine-2,4-diyl) ((2,2,6,6-tetramethyl-4-piperidyl-)imino)hexamethylene((2,2,6,6-tetramethyl-4-piperidyl) imino)), N,N'-bis(3 aminopropyl) ethylenediamine /2,4-bis(N-butyl-N-(1,2,2,6,6-penta- methyl-4-piperidyl)amino)-6-chloro-1,3,5-triazine condensate, tetrakis(2,2,6,6-tetramethyl-4-piperidyl) 1,2,3,4-butanetetracarboxylate, and tetrakis(1,2,2,6,6-pentamethyl-4-piperidyl) 1,2,3,4-butanetetracarboxylate.

With regard to claims 8-13, note claims 22-28 of the above reference regarding the molded articles prepared therefrom.

Thus, the references discloses a polycarbonate resin composition prepared from the same components as claimed by applicants except for use of the particular fatty acid ester compound structure disclosed herein. However, ***JP-A 59-12952*** discloses,1-benzooxazin-4-one derivatives for the protection for polycarbonate resin compositions from ultraviolet rays using a novel ultraviolet light absorber.

The above ultraviolet light absorber is preferably at least one cyclic imino ester in an unreacted form selected from the group consisting of a compound represented by the following formula (I):



Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the particularly structured ultraviolet light absorber of the ***JP-A 59-12952*** since the particular absorber affords a polymer composition the characteristics of becoming highly resistant to heat and oxidation, free from bleeding out, due to the prevention from deterioration by shielding ultraviolet light, by incorporating the cyclic imino ester as an ultraviolet light absorber in a polymer of high melting point. Thus in view of the above, the claimed invention cannot be deemed as obvious and accordingly is unpatentable.

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is **(571-272-1700).**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Terressa Boykin
Primary Examiner
Art Unit 1711